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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/642,267 | 08/18/2000 | Kenneth R Goguen | 07072-939001 | 7447 |

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| EXAMINER |
|---|
| BARAN, MARY C |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2857 | |

DATE MAILED: 08/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/642,267 | GOGUEN ET AL. | |
| | Examiner | Art Unit | |
| | Mary Kate Baran | 2857 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *18 August 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to because Figures 1-5 are sketched on lined paper and the figures are difficult to see. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voigt et al. (U.S. Patent No. 5,623,598) in view of Harrison et al. (U.S. Patent No. 6,128,717).

Referring to claim 1, Voigt et al. teaches a method for presenting system performance to a user in a mass storage system, the storage system having a plurality of disk drive storage elements (i.e. storage disks 32) controlled by a disk drive controller (i.e. disk array controller 34) (see col. 3 lines 5-9), said controller receiving commands and data from (see col. 4 line 65 – 67) and returning at least data to a host computer (see col. 6 lines 10-13), the method includes the steps: executing at at least one host computer a test request by sending commands to said mass storage system (see col. 5 lines 29-31), accumulating, at at least said executing host computer, data

regarding performance of said mass storage system, in response to the requests sent by said host computer (see col. 5 lines 22-24), and presenting said accumulated data, in a graphical plot format, for enabling the visualization of trends in the performance of said mass storage system as a function of at least one selected parameter, in response to said host generated commands (see col. 6 lines 10-13). Voigt et al. does not teach a controller connected to a plurality of host computers.

Harrison et al. teaches a controller (i.e. interface structure 14) which is connected to plurality of host computers (i.e. network environment).

It would have been obvious to one of ordinary skill in the art at the time the invention was to modify Voigt et al. to include the teachings of Harrison et al. to provide a graphical view of the overall performance data for each of the multiple users.

Referring to claim 2, Voigt et al. further teaches the method wherein the parameter is time (see col. 6 lines 5-6).

Referring to claim 5, Voigt et al. further teaches the method wherein said presenting step displays said data on a computer display in said graphical format (see col. 6 lines 10-13).

Referring to claim 6, Voigt et al. further discloses the method wherein said method further comprises selecting at least one test phase for viewing in said graphical plot format (see col. 6 lines 29-33).

Referring to claim 7, Voigt et al. further teaches displaying, in association with said graphical plot format, parameters relating to the graph (see col. 6 lines 33-36).

Referring to claim 8, Voigt et al. further teaches parameters which include at least one of the nature of the test, the size of data blocks which have been used, and the number of data points (see col. 5 lines 1-5).

Referring to claim 9, Voigt et al. further teaches enabling a user to display multiple graphs on a single sheet (see Fig. 7).

4. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voigt et al. (U.S. Patent No. 5,623,598) in view of Harrison et al. (U.S. Patent No. 6,128,717) and further in view of Oshelski et al. (U.S. Patent No. 5,586,059).

Referring to claim 3, as noted above Voigt et al. and Harrison et al. teach all but a method wherein said accumulating step accumulates said data in a plurality of databases, and said method further comprises selecting one of said databases for viewing. Oshelski et al. teaches extracting data and storing the data in a plurality of databases (see col. 5 lines 44-47) and accessing these files to analyze and display in user-specified formats which include charts and graphs (see col. 5 lines 30-40). It would have been obvious to one of ordinary skill in the art to modify the teachings of Voigt et al. in view of Harrison et al. and in further view of Oshelski et al. to make the requested data easier to access and faster to plot.

Referring to claim 4, as noted above Voigt et al. and Harrison et al. teach all but a method wherein said presenting step prints said data in said graphical plot format. Oshelski et al. discloses printing data (see col. 6 lines 17-20) in a user-selected format, which includes charts or graphs (see col. 5 lines 37-40). It would have been obvious to

one of ordinary skill in the art at the time the invention was made to include the teachings Voigt et al. in view of Harrison et al. and in further view of Oshelski et al. to provide the user with a hard copy of the performance data in case of system error or for publication.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Grimsrud discloses a method and apparatus for analyzing interactions between workloads and locality dependent subsystems.

Wilkes et al. discloses a frequently-redundant array of independent disks or particular interest.

Krall, Jr. et al. discloses a control system monitor of particular interest.

DeWitt et al. discloses a system and method for performing monitoring of resources in a data processing system in real time of particular interest.

Kern et al. discloses a host storage management control of outboard data movement of particular interest.

Styczinski discloses a redundant array of disk drives with asymmetric mirroring data processing method of particular interest.

Kedem discloses a method and apparatus for dynamic sparing in a RAID storage system of particular interest.

Idleman et al. discloses a data storage system and method or particular interest.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate Baran whose telephone number is (703)305-4474. The examiner can normally be reached on Monday - Friday from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S Hoff can be reached on (703) 308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-4045 for regular communications and (703)305-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

MCB
July 12, 2002

MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800